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10/813,054

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Yoshitaka Fukushima

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MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER

CASTELLANO, STEPHEN J

ART UNIT

PAPER NUMBER

3781

MAIL DATE

DELIVERY MODE

07/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ED

Office Action Summary

Application No.

10/813,054

Applicant(s)

FUKUSHIMA ET AL.

Examiner

/Stephen J. Castellano/

Art Unit

3781

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 fails to further limit because all of the claim 4 limitations are contained within claim 1 from which claim 4 depends.

Applicant is advised that should claim 17 be found allowable, claim 24 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). **This is a duplicate claim WARNING.**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Danna (5221021).

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Danna discloses a fuel tank structure comprising a lower member (the bottom half of the tank) including a plurality of bottom portions (a first portion defined by the portion of the lower member extending within a circle surrounding bead 32, the circle spaced outwardly from the bead 32 and a second portion defined by the remainder of the lower member extending outside the circle that surrounds the bead 32) each constituting a portion of a plane, the first portion including a single bottom constituting the lowest planar position in the lower member, a display portion defined by bead or bead portion 32 (see Fig. 4), the bead projects inwardly towards the tank interior and is visible on the exterior to the extent that an indentation is visible on the exterior that corresponds to the interior bead 32, the display portion is disposed below a chamber module 16 arranged on the inside of the tank (see Fig. 4).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-8 and 17- 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischerkeller et al. (6371153) (Fischerkeller) in view of Danna.

Fischerkeller discloses a fuel tank structure of a saddle type tank including a lower member including a plurality of bottom portions (two, one on left side and one on right side) that are spaced from each other by a gap, the bottom portions including a single bottom portion (either the right or left bottom wall) constituting the lowest position in the lower member, and a display portion (the outside surface of the left bottom wall) of a working position for locating a waste fuel hole, this lowest position is where the fuel will remain as the level of fuel draws

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down. Each bottom portion has a chamber module. Fischerkeller discloses the invention except for the bead portion. Danna teaches a bead portioned below a chamber module. It would have been obvious to add two bead portions, one to each side, as a means to align and properly secure chamber modules within a tank as taught by Danna.

Re claims 21-23 and the series of non-continuous bead portions that are arranged in a circular direction, it would have been obvious to modify Danna's substantially circular bead to be a series of non-continuous beads arranged in a circular direction by providing more gaps in the circular arrangement as a means to relieve the stress in the bead formation with stress relief at the gaps where no deformation exists and with the stress minimized at the part circular bead formations as motivated by a decrease in stress while maintaining the alignment and securing functions of the beads.

Claims 5-8, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danna in view of Ball et al. (Ball) (2208621).

Claims 5-8 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischerkeller in view of Danna as applied to claims 1 and 4 above, and further in view of Ball.

Danna and the Fischerkeller-Danna combination disclose the invention except for the bead portions being plural and non-continuous and cut portions between the individual bead portions. Ball teaches bead portions (15) near the tank end walls and central bead portion (trough portion 10), the bead portions are separated by cut portions (15a) as shown in Fig. 1. It would have been obvious to add different bead portions, non-continuous bead portions and cut portions to provide different areas of sloping to direct fluid towards a central location for

draining as well as to provide reinforcement to a bottom wall which supports the greatest amount of fluid weight within the container.

Claims 5-8, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danna.

Re the series of non-continuous bead portions that are arranged in a circular direction, it would have been obvious to modify Danna's substantially circular bead to be a series of non-continuous beads arranged in a circular direction by providing more gaps in the circular arrangement as a means to relieve the stress in the bead formation with stress relief at the gaps where no deformation exists and with the stress minimized at the part circular bead formations as motivated by a decrease in stress while maintaining the alignment and securing functions of the beads.

Applicant's arguments with respect to claims 1, 2, 4-8 and 17-24 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 571-272-4535. The examiner can normally be reached on increased flexibility plan (IFP).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony D. Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J. Castellano/
Primary Examiner
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sjc